

CMOD2004

**SURFACE MOUNT
HIGH VOLTAGE
SILICON SWITCHING DIODE**



www.centrasemi.com

ULTRAmiTM



SOD-523 CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMOD2004 type is a high voltage silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a ULTRAmiTM surface mount package, designed for applications requiring high voltage capability.

MARKING CODE: 04

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Continuous Reverse Voltage
Peak Repetitive Reverse Voltage
Average Forward Current
Continuous Forward Current
Peak Repetitive Forward Current
Peak Forward Surge Current, $t_p=1.0\mu\text{s}$
Peak Forward Surge Current, $t_p=1.0\text{s}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_R 240
 V_{RRM} 300
 I_O 200
 I_F 225
 I_{FRM} 625
 I_{FSM} 4.0
 I_{FSM} 1.0
 P_D 250
 T_J, T_{stg} -65 to +150
 θ_{JA} 500

UNITS

V
V
mA
mA
mA
A
A
mW
 $^\circ\text{C}$
 $^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_R	$V_R=240\text{V}$		100	nA
I_R	$V_R=240\text{V}, T_A=150^\circ\text{C}$		100	μA
BV_R	$I_R=100\mu\text{A}$	300		V
V_F	$I_F=100\text{mA}$		1.0	V
C_T	$V_R=0, f=1.0\text{MHz}$		5.0	pF
t_{rr}	$I_F=I_R=30\text{mA}, I_{rr}=3.0\text{mA}, R_L=100\Omega$		50	ns

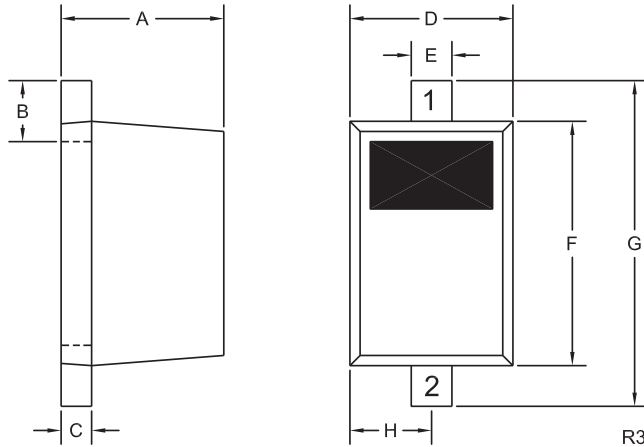
R5 (11-April 2011)

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SOD-523 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: 04

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.020	0.031	0.50	0.80
B	0.008	0.016	0.20	0.40
C	0.002	0.008	0.05	0.20
D	0.028	0.035	0.70	0.90
E	0.008	0.014	0.20	0.35
F	0.039	0.055	1.00	1.40
G	0.055	0.071	1.40	1.80
H	0.016		0.40	

SOD-523 (REV: R3)

R5 (11-April 2011)